

Claims:

1. A compound comprising a steroid hormone stably linked to a DNA-interacting molecule.
2. The compound of claim 1 wherein said stable link includes either a urethane or a thiourethane bond.
3. The compound of claim 2 wherein said stable link includes a urethane bond.
4. The compound of claim 3 wherein said stable link includes two urethane bonds.
5. The compound of any of claims 1 to 4 further comprising a spacer containing 2-30 atoms between the steroid hormone and the DNA-interacting molecule.
6. The compound of any of claims 1 to 4, wherein the spacer contains 5-15 atoms.
7. The compound of any of claims 1 to 4, wherein the spacer contains 9-11, and preferred 10, atoms.
8. The compound of any of claims 1 to 7, wherein the steroid hormone is linked via an urethane bond to the DNA-interacting molecule or the spacer, respectively.
9. The compound of claim 4, wherein the steroid hormone is linked via a first urethane bond to the spacer and the spacer is linked via a second urethane bond to the DNA-interacting molecule.
10. The compound of any of claims 1 to 9 wherein the urethane bond is positioned either at carbon atom 1,2,4,6,7,11a,12,15,16,17 or 21 of a glucocorticoid.
11. The compound of claim 10 wherein the urethane bond is positioned either at carbon atom 6 or 21 of a glucocorticoid.
12. The compound of any of claims 1-11, wherein the steroid hormone is selected from the group consisting of one or more of androgens, gestagens, oestrogens, glucocorticoids, mineralocorticoids, retinoids, thyroids or synthetic steroids.
13. The compound of any of claims 1-11, wherein the DNA-interacting molecule is selected from the group consisting of one or more of intercalating agents, crosslinking reagents, incorporating molecules and ionically interacting molecules.
14. The compound of claim 13, wherein the DNA-interacting molecule is a psoralen.
15. The compound of claim 14, wherein a glucocorticoid is stably linked via an urethane bond at carbon atom 21 of the glucocorticoid to a spacer containing 2-30 atoms, wherein said spacer is covalently linked to a psoralen molecule.
16. A compound of claim 15, wherein the spacer contains 5 to 15 atoms, especially 9 to 11 atoms.

17. A method for the preparation of the compound comprising the steps of ligating a steroid hormone to a DNA-interacting molecule.

18. The method of claim 17 further comprising the steps of ligating a spacer to the steroid hormone and ligating the DNA-interacting molecule to the spacer.

19. The method of claim 18 wherein the steroid hormone is linked via an urethane bond to the spacer.

20. A complex consisting of a compound of any of claims 1-16 complexed to a nucleic acid molecule.

21. A method for the preparation of the complex of claim 20 comprising the steps of ligating a steroid hormone to a DNA-interacting molecule to form a compound and complexing the compound with a nucleic acid molecule.

22. The method of claim 21 further comprising the steps of ligating a spacer to the steroid hormone and ligating the DNA-interacting molecule to the spacer.

23. Use of the complex of claim 20 for introducing a nucleic acid molecule into the nucleus of a cell.

24. Use of the complex of claim 20 for introducing a DNA molecule into the nucleus of a non-dividing cell.

25. A cell transfected with a complex according to claim 20.

26. Use of a cell according to claim 25 for the medical treatment of a human being.

27. A pharmaceutical preparation comprising the complex of claim 20 and a physiologically tolerable carrier.

28. A method for transfecting cells comprising the step of administering a therapeutically effective amount of a complex according to claim 20 to a subject.

29. An assay comprising the steps of

- transfected cells with a complex of claim 20, wherein the DNA molecule contains an expressible gene;
- monitoring the expression of said expressible gene, and
- comparing the expression of said expressible gene in transfected cells with the expression of said expressible gene in non-transfected cells.

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